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**TB CARE I**

# **Cambodia**

**Year 1  
Quarterly Report  
July - September 2011**

**October 28th, 2011**

## Quarterly Overview

<b>Reporting Country</b>	<b>Cambodia</b>
<b>Lead Partner</b>	<b>JATA</b>
<b>Collaborating Partners</b>	<b>FHI360, MSH, KNCV, WHO</b>
<b>Date Report Sent</b>	28 October 2011
<b>From</b>	Jamie Tonsing
<b>To</b>	Dr Chantha Chak
<b>Reporting Period</b>	<b>July-September 2011</b>

<b>Technical Areas</b>	<b>% Completion</b>
1. Universal and Early Access	86%
2. Laboratories	86%
3. Infection Control	67%
4. PMDT	63%
5. TB/HIV	100%
6. Health Systems Strengthening	100%
7. M&E, OR and Surveillance	58%
8. Drug supply and management	100%
<b>Overall work plan completion</b>	<b>82%</b>

### Most Significant Achievements

TB CARE team successfully supported the country to mobilize more than US 1 million for 2011-2012 from TBREACH/WHO for active case finding among migrants, urban poor and contacts of TB patients in 15 poorest operational districts. Earlier in the year, TB CARE team had advocated successfully to the Ministry of Health to ban import and sale of anti-TB drugs of dubious quality from the for-profit sector. This would minimize development of drug resistance due to use of spurious drugs and encourage the private sector to participate more closely with the National TB Program for their TB patients.

Significant achievements during this quarter:

- i)** Launching of active case finding (ACF) activities for TB among irregular migrants who are deported from Thailand, Malaysia and Vietnam. The WHO/TB CARE funds are being used especially for initiating ACF activities for the 15-20% of the 98,000 deportees who are detained in detention camps in Thailand for more than one month. TBREACH/ WHO funds will be used to screen even the 80-85% who are detained for less than one month, or not detained at all.
- ii)** Procurement and trainings on digital x-ray and GenXpert machines completed and installed at CENAT. National lab strategic plan for 2011-2015 drafted. Following approval of proposed X-pert algorithm and revised R&R forms, Xpert will be used for MDR-suspect, PLHIV and for ACF among high risk groups
- iii)** Communications strategy for TB -IC developed and a branded logo ("Saksit", which means effectiveness/blessing in Khmer) for the initiative designed and tested. This will be piloted in Year 2 and its effectiveness evaluated through baseline and endline survey in the pilot sites.
- iv)** Completed development of SMS system for delivery of lab test results to Health Centres (HC) and DOT watchers (DW)/community volunteers. Field testing of protocol, demonstration of the system design, and trainings completed. After completion of orientation for DW planned for October, TB labs, HCs linked to these labs and select DW linked to these HCs are expected to start using the SMS system. This is likely to decrease the time for relay of lab results to HCs, and through the inclusion of DW in the network, aid in earlier initiation of treatment for diagnosed TB patients.

### Overall work plan implementation status

There was delay in initiation of most activities during the year. Though it picked up significant during this quarter, several activities are planned for continuation in Year 2. Hence, some of the achievements of activities started in FY2011 may be more evident only in Oct-Dec 2011 or soon thereafter.

Few activities could not be conducted for reasons beyond the control of the team - such as cancellation of meetings (Activity 1.3.3)

### Technical and administrative challenges


## Quarterly Technical Outcome Report

	2010*	2011**
Number of MDR cases diagnosed	31	N/A
Number of MDR cases put on treatment	41	47
* January - December 2010    ** January - September 2011		

### Technical Area 1. Universal and Early Access

Expected Outcomes		Outcome Indicators	Indicator Definition	Baseline	Target	Result	Highlights of the Quarter	Challenges and Next Steps to Reach the Target
					Y1	Y1		
1	Improved access for high risk populations	Increase coverage of prisons	N and % of TB patients reported in prisons among the total number of prisoners in project sites	101/3453 (3%)	>4%	95/4805 (1.98%)	Figures for USAID fiscal year: Oct 2009 to Setp 2010 baseline, Oct 2010 to Setp 2011 for Year 1. Target not achieved. Low notification because it is based on passive case finding only. Active case finding postponed	Annual mass screening of all prisoners (using X-ray and sputum exam) has been delayed as the mobile team is currently busy with the ongoing national TB prevalence survey. Postponed for Oct-Nov 2011
2	Earlier diagnosis	Promote earlier diagnosis through decrease in turn around times for lab results	Average duration from sputum collection at Health Centres to receipt of lab results	NA	<5 days	Not yet available	SMS system development and trainings completed during the quarter but actual use of the system will start in the next quarter.	Several Health Centres selected for pilot sites are affected by the current flooding in Cambodia and were closed for several days. Baseline data collection for the pilot sites started and results will be reported in next qtr.
3	Engage communities and all providers	Number of suspects referred by community health volunteers	Number of suspected TB cases referred by community volunteers to the Health Centre for sputum test.	22,665 (NTP)	30.000	Not yet available	Data from NTP report following calendar year, so not yet available. Data will be updated when 2011 NTP report becomes available	Since C-DOTS is implemented by more than 12 NGOs with different reporting lines based on source of funding (GF and USAID), complete information for the entire country for the 2011 calendar year will only be obtained and published by NTP in early 2012.

### Technical Area 2. Laboratories

Expected Outcomes	Outcome Indicators	Indicator Definition	Baseline	Target	Result	Highlights of the Quarter	Challenges and Next Steps to Reach the Target
				Y1	Y1		
1	Improved TB diagnosis with the use of new diagnostics	Number of tests	Number and percent of tests performed by GeneXpert	NA	35,000	0	Delay partly because of the intention to roll this out in the context of a national lab plan to standardise the approach and tools used across partners.

<b>2</b>	Improved diagnostic capacity for smear negative TB patients	Diagnostic capacity improvement through establishments of diagnostic committees and use of digital x-rays	N and % of x-rays judged to have been read correctly by the diagnostic committees according to the expert cross reader	80%	>85%	89%	Target achieved. Expanded to one additional province covering 11/24 provinces in the country	
<b>3</b>	Quality assurance of sputum microscopy	EQA for sputum smear microscopy	N and % of laboratories with over 95% correct results	60/79 (76%)	>85%	77.5%	Target not achieved but still above the baseline	

Technical Area		3. Infection Control					
Expected Outcomes	Outcome Indicators	Indicator Definition	Baseline	Target	Result	Highlights of the Quarter	Challenges and Next Steps to Reach the Target
				Y1	Y1		
1	TB-IC measures implemented at Health Centres & Communities	HC staff trained on TB-IC	N and % of HCs with trained staff on TB-Infection Control in project areas	0/35	100%	37/37 (100%)	Target achieved
2		HC staff screened for TB	Number and % of HCs performing annual TB screening of health care workers in project areas	0/35 Heath Centres	100%	Not available	Health facilities are reluctant to offer annual TB screening for staff. There are no directions or guidelines from NTP to implement this activity.

Technical Area		4. PMDT						
Expected Outcomes		Outcome Indicators	Indicator Definition	Baseline	Target Y1	Result Y1	Highlights of the Quarter	Challenges and Next Steps to Reach the Target
1	Strengthen PMDT under the NTP	Number of MDR cases put on treatment	Number of MDR cases put on treatment during the calendar year	34 (2010)	80	47	WHO mobilized non-TBCARE funds to hire a national coordinator for PMDT to improve the HR capacity of NTP/CENAT to intensify PMDT efforts. Data for Jan- Sept 2011. Data will be updated when 2011 NTP report becomes available	The transport mechanism for sputum from the patients to the single culture/DST laboratory (located in Phnom Penh) is the weakest link of PMDT now, which is preventing achievement of targets. CENAT/NTP hopes to resolve this issue soon by providing advance money to field supervisors for sputum transport. US-CDC has already provided funds for this purpose. TB CARE Year 2 will provide more funds for this through CHC, as sub-grantee of the WHO.

Technical Area		5. TB/HIV						
Expected Outcomes		Outcome Indicators	Indicator Definition	Baseline	Target	Result	Highlights of the Quarter	Challenges and Next Steps to Reach the Target
					Y1	Y1		
1	Increased uptake of HIV testing among TB patients	HIV testing rates of TB patients	N and % of TB patients who had an HIV test result recorded in the TB register	28246/40199 (70%)	>80%	81%	NTP data from Jan to June 2011: 16466/20434=80.5%. Data will be updated when the 2011 NTP report becomes available	Non-standard and unclear methods of payment of incentives and dwindling funds may risk the progress of this indicator in future.





Technical Area		6. Health Systems Strengthening						
Expected Outcomes		Outcome Indicators	Indicator Definition	Baseline	Target	Result	Highlights of the Quarter	Challenges and Next Steps to Reach the Target
					Y1	Y1		
6.1	NTP partner coordination strengthened	Regular meetings of TWG held	Number of TWG meetings held	8	10	12	3 TWG in Q4 2011: 2 lab technical working group meetings & 1 MDR-TB technical working group meeting.	



Technical Area		7. M&E, OR and Surveillance						
Expected Outcomes		Outcome Indicators	Indicator Definition	Baseline	Target Y1	Result Y1	Highlights of the Quarter	Challenges and Next Steps to Reach the Target
1	Strengthened monitoring and evaluation	Peer review of the performance of the NTP in at least two provinces every quarter	Peer review of the performance of the NTP in at least two provinces every quarter	NA	4 provinces	Not yet available		

**Technical Area 8. Drug supply and management**




Expected Outcomes		Outcome Indicators	Indicator Definition	Baseline	Target Y1	Result Y1	Highlights of the Quarter	Challenges and Next Steps to Reach the Target
1	Promote operations research	Research agenda for the NTP developed	Research agenda for the NTP developed	NA	Done	Done	Completed in last quarter	



## Quarterly Activity Plan Report





Outcomes	1. Universal and Early Access		Lead Partner	Approved Budget	Cumulative Completion	Planned Completion		Cumulative Progress and Deliverables up-to-date
						Month	Year	
1.1 Improved access for high risk populations	1.1.1	Consultation workshop to develop strategic plan for active case finding and related M&E framework (by in-country team)	WHO	4.311	 100%	Jul	2011	Guidelines and Standard Operating Procedure for active case finding (ACF), including related M&E framework already drafted. A consultation workshop with TB partners in Cambodia was held on 14 and 15 July at Phnom Penh, with technical assistance from Dr Nobu Nishikiori, the focal person coordinating this activity at WHO regional office in Manila, and attended by total 68 participants (F=19, M=49 male).
	1.1.2	Active case finding (ACF) targeting high-risk cross-border migrants by establishing mobile units within existing TB Government services	WHO	47.140	 75%	Dec	2011	TB CARE I, CENAT and International Organization for Migrants have been implementing this activity. There was delay in starting this activity. After conducting advocacy meetings and trainings, the screening of migrants has just started. Initial reports indicate high incidence rate of TB in this vulnerable group. Detailed reports will be available by Dec 2011.
	1.1.3	Conduct a detailed cost-effectiveness analysis and document achievement of ACF (1.1.2)	WHO	8.452	 75%	Dec	2011	Final reports will be drafted on 24 Oct - 8 Nov 2011 with the assistance of external assistance from WHO/WPRO. Cost-effectiveness of the ACF activities will be analyzed and documented for the past 5-6 years, including the current efforts of ACF in migrants and proposed ACF efforts in 2011-2012.
	1.1.4	Childhood TB pilot sites - expand and strengthen contact tracing	JATA	60.377	 100%	Sep	2015	Expansion of childhood TB pilot sites to five additional operational districts (ODs) completed to cover a total of 9 ODs (Kg Cham, Sampov Meas, Battambang, Mongkol Borei, Moug Russey, Ochrov, Preah Net Preah, Kg Speu and Prey Veng). TB CARE I continue to monitor the implementation of childhood TB in the 9 ODs. During the quarter several joint visits to the fields from TB CARE I and CENAT team have been conducted to supervise the activities. The objectives of the field visits are to 1) assess the capacity of field staff and encourage the to strengthen the contact tracing and 2) to provide on the job training for diagnostic capacity. Data from the 9 ODs for this quarter shows that 2784 TB suspected children were referred by health centers and C-DOTS partners to the referral hospitals for complete diagnostic workup including clinical examination, TST, x-ray based on NTP Childhood TB guideline. Of those referred (2784), 636 were diagnosed as TB patients and registered for treatment.





	<b>1.1.5</b>	Expand coverage for provision of TB/HIV services in prisons working through C-DOTS partners where possible	FHI	64.951	 100%	Sep	2015	<p>At the beginning of Year I, TB CARE I met with other USAID partners (TB staff from RHAC, RACHA, URC) to explore opportunities for collaboration, particularly for expanding TB/HIV services in the new prisons located in C-DOTS project sites of partners. Plans to jointly conduct start up activities following which the concerned partner would support continuation of the more routine operations could not be realized due to competing priorities and inadequate resources to take this on (from partner's side).</p> <p>In collaboration with General Department of Prisons (GDP), NTP/CENAT, NAP/NCHADS, TB CARE I was able to complete preparatory activities and three new prisons sites (Kg Speu, Koh Kong and Kg Som) started providing TB/HIV services from July 2011. In the four existing sites (Kg Cham, CC3, Kandal and Takeo), routine activities were partially implemented in Jan-March 2011 due to shortage of funds but resumed full operations after arrival of TB CARE I funds. Annual screening of prison inmates was conducted in Kandal prison in Sep 2011. The remaining six prisons will be covered during the next quarter.</p>
1.2 Earlier diagnosis	<b>1.2.1</b>	Establish model sites incorporating Quality Improvement (QI) principles and integrating C-DOTS and PPM	FHI	81.955	 75%	Dec	2015	<p>Following the Quality Improvement (QI) workshop conducted with external technical assistance in May 2011, two of the five QI objectives identified during the workshop were selected for implementation in 5 Health Centres in Kampong Cham and Chamkar Leu OD. Follow on sensitization and planning workshops were conducted to take this forward including a stakeholder workshop on 24 August (27 participants, 2 Female) to bring together all participating sites and sensitize managers about the importance of QI initiative and form a QI team consisting of TB and QI expert to lead implementation. The team visited selected sites to identify challenges and conduct a root cause analysis which was presented in a subsequent meeting on 15-16 August (50 participants, 4 Female) to generate change ideas for improvement of the QI topic identified - to increase identification and referral of TB suspects to public health facilities by private providers and community volunteers. QI measurement tools are being finalized to aid monitoring of progress and for use in monthly learning sessions and reporting.</p> <p>TB CARE I worked with CENAT and PATH to define common and necessary set of activities as well as core indicators for PPM implementation. This was presented during the national PPM planning workshop organized by PATH on 3-4 August at Phnom Penh attended by representatives from 10 PPM implementing provinces and partners (54 participants, 5 F). Participants were asked to develop a workplan and budget using the format and submit by September.</p> <p>Simultaneously, series of meetings and discussion were held with K Cham provincial health departments to finalize the PPM work plan for all 10 ODs. An orientation workshop was conducted in Kampong Cham from 7-9 September (343 participants, 80F) to review existing PPM activities, discuss planned activities and sign annual letters of agreement with private providers in order to commence referral of TB suspects by private providers to public health facilities.</p>







	<b>1.2.2</b>	Introduce use of information technology to improve TB services - reduce TAT for lab results and monitor contact tracing	FHI	92.790	 85%	Dec	2015	<p>TB CARE I engaged the services of InSTEDD, an ICT company to design the technology system including workflow, content and coding of SMS messages, and storage of data for monitoring purposes. They also helped develop job aids and conducted training for trainers. Field visits to project sites to test the protocol and demonstration to CENAT staff was conducted in May 2011. Following finalization of the system design and trainings, following trainings/orientation have been conducted or planned for:</p> <ul style="list-style-type: none"> <li>• Training of trainers for SMS on 23 August 2011 for 11 participants(1F) from CENAT, K Cham province (pilot site) and FHI 360</li> <li>• Training on the use of SMS and content/codes for the messages for Health Centre (HC) and TB lab staff on 20 -21 September 2011 at Kampong Cham and attended by 38 participants (7F)</li> <li>• Orientation for DOT watchers (DW) to interpret SMS messages and take action to facilitate earlier start of treatment for diagnosed cases, planned for October</li> </ul> <p>By end of October, all 4 TB labs in Chamkar Leu and K Cham OD, 15 HCs linked to these labs and select DOT watchers/community volunteers linked to these HCs are expected to start using the SMS system. This is likely to decrease the time for relay of lab results to HCs, and through the inclusion of DW in the network where possible, aid in earlier initiation of treatment for diagnosed TB patients.</p>
1.3 Engage communities and all providers	<b>1.3.1</b>	Develop standard training materials for C-DOTS which includes comprehensive management of TB & conduct ToT	FHI	26.057	 75%	Sep	2011	<p>This was included in the agenda item of the C-DOTS technical working group meeting. C-DOTS implementation is supported by more than 10 partners in different geographical areas of the country using the same approach in principle but operated differently to adjust to local needs, including different materials and methods for C-DOTS training which partners were used to and the need for changing that was not appreciated. As an alternative approach, TB CARE I tailored materials on topics that were relevant for C-DOTS but not routinely covered by all partners – such as childhood TB and infection control– and circulated it to C-DOTS partners to include in their ongoing C-DOTS trainings. Because of the delay in grant negotiation for continued funding for Global Fund Round 7 phase 2 grants, C-DOTS activities of many partners were interrupted including ongoing trainings.</p>
	<b>1.3.2</b>	Document TB programme at garment factories in collaboration with CATA (using TA)	FHI	19.800	 100%	Sep	2011	<p>TB CARE I recruited a local consultant to undertake this activity in collaboration with Cambodia Anti-TB Association (CATA), the NGO supporting provision of TB services garment factories. A formative qualitative assessment of CATA's TB control programme in 17 factories in Phnom Penh areas was conducted from August –September 2011 with the objective of identifying strengths and weaknesses in order to improve its current implementation.</p> <p>The assessment showed acceptance of the project by both the factories and the health Centres and suggestion to scale it up as they noticed the direct benefits of the programme on the factory workers and TB patients. At the same time, this assessment indicated the need to address barriers to prevention, diagnosis and treatment of TB in the workplace such as (i) Tackle stigma and discrimination through health education and information (ii) Provide time for health education (ii) Reduce lengthy laboratory testing and results at the HC (iii) Promote treatment adherence through DOTS (iv) Address mobility issues particularly frequent turnover of factory health staff.</p>






	<b>1.3.3</b>	Establish TWG for child TB involving MCH/IMCI/paediatric hospitals (eg Kantha Bopha), and support participation in international meetings of childhood TB working group	WHO	6.159	 75%	Sept	2011	<p>* After several attempts, TB CARE I team finally met Dr Richner and staff of Kantha Bopha hospitals on 19 April and visited his hospital on 26 April 2011 along with the focal person for childhood TB at CENAT. Technical working group for Childhood TB has been formed and the first meeting was conducted in May 2011. Kantha Bopha Hospital has agreed to be a member of the national childhood TB working group and participate in the Stop TB Partnership Childhood TB Working Sub-Group meeting in Geneva later this year, if invited.</p> <p>* TB CARE I participated in meetings and facilitated meetings with CENAT staff to contribute to revision of Integrated Management of Childhood Illnesses (IMCI) guidelines coordinated by the Department of Communicable Disease Control, Ministry of Health. For the first time, the IMCI guidelines for Cambodia will include TB and HIV in the protocol.</p> <p>* The childhood TB working sub-group meeting will not happen this year, as originally planned by the WHO/HQ, and hence TB CARE I will not be able to support participation of pediatricians from Cambodia in this international meeting this year.</p>
					 <b>86%</b>			

		<b>2. Laboratories</b>				<b>Planned Completion</b>		<b>Cumulative Progress and Deliverables up-to-date</b>	
<b>Outcomes</b>			<b>Lead Partner</b>	<b>Approved Budget</b>	<b>Cumulative Completion</b>	<b>Month</b>	<b>Year</b>		
2.1 Improved TB diagnosis with the use of new diagnostics	<b>2.1.2</b>	Provide ongoing TA to build capacity at NTRL and coordinate introduction of new diagnostics (local staff based at NTRL))	JATA	13.840	 100%	Sep	2015	Recruitment of Lab officer was finished and the new staff has joined the TB CARE I team. The lab officer has worked with CENAT team and coordinated the introduction of new diagnostics such as Xpert training, EQA and FM expansion.	
	<b>2.1.3</b>	Pilot introduction of GeneXpert including evaluating its operational and technical feasibility in Cambodia	JATA	78.421	 50%	Dec	2015	Procurement of two Genexpert machines and cartridge has been completed. The machine is placed at the national TB reference lab at CENAT, placement for the second machine will be finalised considering other machines that are being procured with other funding sources and in sites that meet the criteria for site selection to optimise the use of the machines. TB CARE I conducted Xpert training for 13 staff from NTRL (F=7, M=6) at Phnom Penh. Xpert will be used from October 2011 for MDR-TB suspects and other high risk groups including people living with HIV, prison inmates etc. Full scale implementation and evaluation will be conducted in 2012.	
	<b>2.1.4</b>	Pilot expansion of LED microscopy network	JATA	79.825	 100%	Sep	2015	Following trainings for lab technicians conducted in June 2011, 9 provinces have started using LED FM from this quarter (Siem Reap, Kompong Speu, Kampot, Kep, Preah Sihanouk, Banteay Meanchey, Prey Veng, Odor Meanchey and Kompong Thom)	
	<b>2.1.5</b>	Provide TA to develop a national lab plan including plans for introducing new diagnostics	JATA		 100%	Aug	2011	With the technical support from TB CARE I, the development of national TB lab strategic plan was initiated and the version 1 of the draft was developed. The draft was shared and discussed within the CENAT team and partner for finalization process. Draft X-pert algorithm and proposed revision of recording and reporting forms to include information on Xpert has been shared with partners. Since several partners are planning to introduce Genexpert, it will be finalised by the lab technical working group to facilitate standardisation across partners.	

2.2 Improved diagnostic capacity for smear negative TB patients	<b>2.2.1</b>	Support expansion of diagnostic capacity improvement	JATA	174.252	 100%	Sep	2015	Following expansion to one additional province this year, total number of provinces implementing diagnostic capacity improvement activities is now 11 provinces. TB CARE I continues to support to strengthen the capacity of staff in diagnosis skill for smear negative TB. For this quarter, TB CARE I and CENAT team made several field visits to monitor the implementation and also provided on the job training for staff. Data collected during regular joint monitoring and supervision visits indicate that 760 smear negative TB suspects were referred from health centers to referral hospitals for further diagnosis by chest x-ray examination during this quarter. Of those, 326 cases were diagnosed as smear negative TB which is equal to 43.%. To strengthen the capacity of diagnosis for smear negative TB, central team supervisors had cross check reading of all x-ray films diagnosed by referral hospital TB physicians. The agreement rate between CENAT and referral hospital doctor for this quarter is 89.3%. To improve the sensitivity of smear microscopy, TB CARE I strengthens the skill of health center staff in making smear slides and sending to TB lab units for smear microscopy. The result from the monitoring the smear quality reveals that the health center staff have kept improving the quality of sputum collection to 73.1%, smear size to 83%, smear thickness to 58% and evenness to 48%.
	<b>2.2.2</b>	Pilot introduction of digital X-ray including evaluating its operational and technical feasibility in Cambodia	JATA	56.602	 50%	Dec	2015	The procurement of digital x-ray has been completed, it is now placed at CENAT. 21 TB physicians (F=0, M=21) were trained on advance X-ray reading skill as a part of strengthening their x-ray reading skill for smear negative TB diagnosis. Radiologists at CENAT have started using the machine from this quarter, initially for patients availing of services at CENAT hospital. Full scale implementation and evaluation will be conducted in 2012.
2.3 Quality assurance of sputum microscopy	<b>2.3.1</b>	Support operational costs for conducting EQA for sputum smear microscopy (slide collection from labs, cross-checking of slides, on-site evaluations of labs, quarterly review workshops)	JATA	43.300	 100%	Sep	2015	Regular activities of EQA are being implemented in the 9 provinces supported by TB CARE I. Slide selection and cross checking of smear slides and on-site evaluation for EQA are conducted on quarterly basis. There are 83 TB lab units under TB CARE I support. The result from this quarter of EQA shows that all 80 lab units participated in the EQA process. 77.5% of the labs (62/80) provided over 95% correct results
					 <b>86%</b>			




		<b>3. Infection Control</b>			<b>Planned Completion</b>		<b>Cumulative Progress and Deliverables up-to-date</b>	
<b>Outcomes</b>			<b>Lead Partner</b>	<b>Approved Budget</b>	<b>Cumulative Completion</b>	<b>Month</b>	<b>Year</b>	
3.1 TB-IC measures implemented at Health Centres and Communities	<b>3.1.1</b>	Develop training modules on TB-IC to complement general IC training modules, conduct ToT, and support trainings as part of existing C-DOTS training where possible	FHI	15.286	 100%	Sep	2011	As discussed with partners supporting general IC activities in Cambodia (URC and WHO), it was agreed to broaden the scope of this training by including 3 of the 12 general IC training modules (Hand Hygiene, Personal Protection Equipment (PPE), Waste Management) along with a TB-IC module for trainings at Health Centre level. A team comprising of TB-IC trainers from CENAT and TB CARE I staff developed training materials for TB-IC based on the SOP and existing slide sets. Three training courses covering 37 Health Centres from Kampong Cham was completed in August and September 2011. In total, 82 participants (25 Female) attended the training covering four modules - Hand hygiene, waste management, TB-IC, and PPE

	<b>3.1.2</b>	Develop and implement communications strategy for TB-IC targeted at health facilities and communities	FHI	13.411	 75%	Dec	2012	In collaboration with in-house communications experts at FHI/Cambodia office, field visits were made to understand target audience profile and opinion to develop objectives and goals for TB-IC communications strategy. Ongoing trainings and workshops involving Health Centre staff were used to obtain stakeholder inputs for the communication strategy and develop a brand. Pretesting of the brand as well as key messages has also been completed. As a follow up, communication materials to promote the brand and key messages targeted at HC staff, DOT watchers and community will be designed and developed. Prior to launching, a baseline survey is planned for Y2 of TB CARE I so that the impact of this communication strategy can be measured after a period of implementation.
	<b>3.1.3</b>	Promote implementation of TB-IC measures at Health Centres and communities	FHI	9.900	 25%	Dec	2015	Since development of training materials and training itself were completed only in September, monitoring implementation of TB-IC measures will begin from Year 2.
					 67%			

	4. PMDT					Planned Completion		Cumulative Progress and Deliverables up-to-date	
Outcomes			Lead Partner	Approved Budget	Cumulative Completion	Month	Year		
4.1 Strengthen PMDT under the NTP	4.1.1	Operational cost for establishment of electronic recording and reporting systems, in collaboration with MSH	WHO	7.345	 0%	Sep	2011	Due to delays in start of Year 1 activities, MSH/TB CARE expert was able to visit the country for initial assessment of using electronic recording and reporting (e-R&R) only in August 2011. CENAT/NTP has agreed to use e-R&R for PMDT initially. This may happen only from Year 2 of TB CARE. Hence, the WHO cannot conduct this activity in Year 1.	
	4.1.2	Develop standard operational procedures for the MDR-TB staff (using TA)	WHO	8.452	 75%	Dec	2011	Two SOPs, one for transport of specimen and another for case management, have already been drafted. These will be finalized with technical assistance from WHO/WPRO in December 2011.	
	4.1.3	Trainings and supervision of PMDT activities	WHO	53.280	 75%	Sep	2015	CENAT, CHC and WHO have visited around 60% of the MDRTB treatment sites (especially, the larger ones) several times and provided feedback to all partners during regular TWG (MDRTB) meetings. Several rounds of trainings were conducted in Aug-Sep 2011 on how to suspect and transport specimens of MDRTB suspects. Clinical trainings and review of PMDT will also be done using assistance from external expert in Dec 2011.	
	4.1.4	Cost share salary of WHO TB officer for TB CARE I work (40%)	WHO	65.540	 100%	Sep	2011	Ongoing activity. All WHO/TB CARE I activities are coordinated and lead by the WHO officer	
					 63%				



	5. TB/HIV			Lead Partner	Approved Budget	Cumulative Completion	Planned Completion Month	Year	Cumulative Progress and Deliverables up-to-date
Outcomes									
5.1 Increased uptake of HIV testing among TB patients	5.1.1	Support TB/HIV collaborative activities by supporting HIV testing of TB patients (Option 2)	WHO	40.680	<div><div></div></div> 100%		Sep	2015	This is an ongoing activity. TB CARE 1 supports testing of about 25% of the TB cases in the country.
					<div><div></div></div> 100%				

<b>6. Health Systems Strengthening</b>						<b>Planned Completion</b>	<b>Cumulative Progress and Deliverables up-to-date</b>	
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Outcomes			Approved Budget	Cumulative Completion	Month	Year	
6.1 NTP partner coordination strengthened	6.1.1	Assist CENAT in leveraging resources	n.a	 100%	Sep	2015	TB CARE I provides support to CENAT in most aspects of Global Fund processes particularly grant negotiations for Round 7 phase II, preparations for the upcoming Round 11. TB CARE I is assisting with financial & programmatic gap analysis, priority setting, and in updating the workplan of the NTP for the next five years in preparation for Round 11.
	6.1.2	Support partner coordination and contribute to the functioning of TWGs	n.a	 100%	Sep	2015	TB CARE I facilitated establishment of the childhood TB TWG and C-DOTS & PPM technical working group. Also participates in all other TWG meetings coordinated by CENAT including lab, MDR-TB and TB/HIV.
				 100%			

7. M&E, OR and Surveillance		Lead Partner	Approved Budget	Cumulative Completion	Planned Completion Month/ Year		Cumulative Progress and Deliverables up-to-date	
Outcomes								
7.1 Strengthened monitoring and evaluation	7.1.1	Introduce e-TB manager and conduct assessment of how e-TB manager can be implemented for MDR-TB in Cambodia	MSH	70.938	<div><div></div></div> 100%	Sep	2011	Dr Samuel Kinyanjui from MSH/ TB CARE I visited Cambodia from 7-13 August to introduce the e-TB manager system and assess the feasibility of implementing e-TB manager for MDR-TB case management and second line drug management in Cambodia. It was proposed to pilot (phase 1) the e-TB manager tool in 3 MDR-TB treatment sites with reliable unlimited internet access (Example: CENAT, KSF and Kampong Cham). The next steps include customization of e-TB manager for PMDT in Cambodia, speed up the development of the offline e-TB module which may be more suitable for Cambodia, and training of staff from pilot sites. CENAT and key partners need to set aside multi-year funding to support e-TB Manager implementation, finalize the DR-TB data collection and reporting tools, finalize the pilot sites and ready them for e-TB manager tool including availability of computers, staff proficient in basic computer use, and reliable internet connection.
	7.1.2	Coordinate a peer-review process for internal program evaluation	FHI	13.844	<div><div></div></div> 50%	Dec	2015	A standard protocol for use during the review, including means for conducting data quality audit, is being drafted and needs to be finalized with those who will be using the tool. This activity needs involvement of CENAT and provincial staff. Delayed because the TB CARE I M&E officer was in position only from July 2011 and also many of the key CENAT staff (with M& E responsibilities) are currently fully occupied with field work of the national TB prevalence survey so need to plan it around their availability. Planned for next quarter
	7.1.3	Develop and train project staff on the use of information system for TB CARE I, based on existing FHI/Cambodia's Information System (CAMIS)	FHI	14.058	<div><div></div></div> 25%	Sep	2011	Recruitment of the TB CARE I M& E was delayed till July 2011. Other web-based options (besides CAMIS which is an access database) are being considered to meet the needs of the TB CARE project and partners working in different offices, including options for sharing files (reports, data etc) and a common calendar. This activity will be taken up in Year 2 since it is also proposed to develop a website for the NTP during that time
				<div><div></div></div> 58%				

8. Drug supply and management								Cumulative Progress and Deliverables up-to-date	
Outcomes		Lead Partner	Approved Budget	Cumulative Completion	Planned Completion Month	Year			

8.1 Promote operations research	8.1.1	TA to support development of research agenda for the NTP	KNCV	25.834	 100%	Jun	2011	Drs Saskia den Boom and Jacques van den Broek from KNCV visited Cambodia from 20-26 June 2011. They facilitated a consultative workshop attended by 38 participants (F=6, M=32) from CENAT and representative of 16 organizations between 22 and 25 June 2011 in Phnom Penh. The operational research agenda on TB for the next 5 years was drafted through an interactive process and discussions in which all workshop participants actively participated. As a next step, it was recommended to develop a research committee within CENAT that includes external advisors and collaborators from partner organizations, and to assist in implementation of operational research on topics identified in the TB research agenda.
					 100%			

## Quarterly Activity Plan Modifications

Request for Cancellation or Discontinuation of Activities										
Approved By (write dates)			Old Code	1. Universal and Early Access	Lead Partner	Remaining Budget	New Code	Replace with the following activity (if	Lead Partner	Proposed Budget*
Mission	PMU	USAID		Activities from the Work Plan						
				{Copy from the work plan}						

Request for Postponement of Activities to Next Year						
Approved By (write dates)			Old Code	1. Universal and Early Access	Lead Partner	Remaining Budget
Mission	PMU	USAID		Activities from the Work Plan		
			1.3.3	Support participation in international meetings of childhood TB working group	WHO	
			4.1.1	Operational cost for establishment of electronic R&R system	WHO	
			7.1.3	Develop and train project staff on the use of information system for TB CARE I	FHI	

Request for Adding New Activities to the Current Work Plan						
Approved By (write dates)			New Code	1. Universal and Early Access	Lead Partner	Proposed Budget*
Mission	PMU	USAID		Proposed New Activities		
19-sep-11	21-sep-11		1.3.4	Expand PPM to 8 operational districts in Kampong Cham	FHI	4.800
19-sep-11	21-sep-11		1.3.5	Recruit 1 PPM coordinator	FHI	3.600
19-sep-11	21-sep-11		2.1.6	Procure additional Xpert cartridges	JATA	11.000
19-sep-11	21-sep-11		2.1.7	Cost of culture and DST for Xpert pilot	JATA	4.000
19-sep-11	21-sep-11		2.2.3	Supplement cost of digital x-ray	JATA	9800
19-sep-11	21-sep-11		6.1.3	Recruit coordinator for Global Fund Round 11 proposal development	WHO	2.600
19-sep-11	21-sep-11		7.1.4	Printing of NTP documents	FHI	8.400

\* Budget for new activities comes from expected savings (i.e. reduction in ICR for FHI).



## Quarterly Photos (as well as tables, charts and other relevant materials)



Dr Sayoeun, TB specialist at CENAT reads the result of a tuberculin skin test in a child suspected to have TB. Photo by Mr Seak Kunrath, JATA/TB CARE I Cambodia





Former MDR-TB patient from Takeo province in Cambodia at work. He is now cured and supports his family by selling small birds made of grass



Picture by Dr Rajendra Yadav, WHO/TB CARE 1, Cambodia



Child TB suspects identified and referred by Health Centres and community volunteers wait to be seen by TB specialist at a referral hospital. Photo by Mr Seak Kunrath, JATA/TB CARE I Cambodia





## Inventory List of Equipment TB CARE I

<b>Organization:</b>	<b>TB CARE I</b>
<b>Country:</b>	Cambodia
<b>Reporting date:</b>	20-okt-11
<b>Year:</b>	2011



Description (1)	ID numbers (2)	Acquisition date (3)	Acquisition cost (4)	V.A.T (5)	Location (6)	Condition (7)	Dispositio n date (8)	Title held by	Insurance Policy #
Air-conditioner	001- (Sanyo)	25 Feb 2011	\$373,00	N/A	JATA/TB CARE Office, CENAT, Phnom Penh	Good	N/A	N/A	N/A
Outlet pwower	002-	10 Jun 2011	\$7,80	N/A	JATA/TB CARE Office, CENAT, Phnom Penh	Good	N/A	N/A	N/A
Outlet pwower	003- (*Phillipe)	21 June 2011	\$12,80	N/A	JATA/TB CARE Office, CENAT, Phnom Penh	Good	N/A	N/A	N/A
Outlet pwower	004- (Phillipe)	21 June 2011	\$10,90	N/A	JATA/TB CARE Office, CENAT, Phnom Penh	Good	N/A	N/A	N/A
USB Hub	004	01 June 2011	\$8,00	N/A	JATA/TB CARE Office, CENAT, Phnom Penh	Good	N/A	N/A	N/A
Memory 2 G	016-	17 Aug 2011	\$30,00	N/A	JATA/TB CARE Office, CENAT, Phnom Penh	Good	N/A	N/A	N/A
Paper cutter	017-	19 Aug 2011	\$25,00	N/A	JATA/TB CARE Office, CENAT, Phnom Penh	Good	N/A	N/A	N/A
X-ray Cassettes (Kodak)	006-1-12 (Kodak)	1 June 2011	\$3.156,00	Not paid	Provinces, Cambodia	Good	N/A	N/A	N/A
Digital X-ray (Kodak)	007- (Kodak)	28 June 2011	\$41.732,00	Not paid	CENAT, Phnom Penh	Good	N/A	N/A	N/A
Cassette for digital x-ray	008- (Kodak)	28 June 2011			CENAT, Phnom Penh	Good	N/A	N/A	N/A
Cassette for digital x-ray	009- (Kodak)	28 June 2011			CENAT, Phnom Penh	Good	N/A	N/A	N/A
Desk top for digital x-ray	010- (Kodak)	28 June 2011			CENAT, Phnom Penh	Good	N/A	N/A	N/A
GeneXpert IV	011- (Cepheid)	4 Aug 2011		Not paid	CENAT, Phnom Penh	Good	N/A	N/A	N/A
Laptop for genexpert	012- (Dell)	4 Aug 2011	\$17.500,00		CENAT, Phnom Penh	Good	N/A	N/A	N/A
Printer for genexpert	013- (HP)	4 Aug 2011	\$538,46	Not paid	CENAT, Phnom Penh	Good	N/A	N/A	N/A
UPS for gerexpert	014- (Dell)	4 Aug 2011	\$945,72	Not paid	CENAT, Phnom Penh	Good	N/A	N/A	N/A
Barcode reader for genexpert	015- (Cepheid)	4 Aug 2011	Included in xpert	Not paid	CENAT, Phnom Penh	Good	N/A	N/A	N/A
GeneXpert IV	018- (Cepheid)	4 Aug 2011	\$17.500,00	Not paid	CENAT, Phnom Penh	Good	N/A	N/A	N/A
Laptop for genexpert	019- (Dell)	4 Aug 2011	Included in xpert	Not paid	CENAT, Phnom Penh	Good	N/A	N/A	N/A
Printer for genexpert	020- (HP)	4 Aug 2011	\$538,46	Not paid	CENAT, Phnom Penh	Good	N/A	N/A	N/A
UPS for gerexpert	021- (Dell)	4 Aug 2011	\$945,72	Not paid	CENAT, Phnom Penh	Good	N/A	N/A	N/A
Barcode reader for genexpert	022- (Cepheid)	4 Aug 2011	Included in xpert	Not paid	CENAT, Phnom Penh	Good	N/A	N/A	N/A
Laptop Dell Inspiron N4030	Service Täge:G934SP1)	11-mei-11	\$494,00	N/A	General Department of Prison (GDP), Phnom Penh	Good	N/A	N/A	N/A

[illegible]

(1) Description of equipment: transportation (vehicles), administration (computers, faxes), laboratory equipment or others

(3) Date of invoice

(5) Note any sales tax charged

(7) Good/fair or bad

where a recipient compensated TB CARE I for its share. Attach supplementary info